

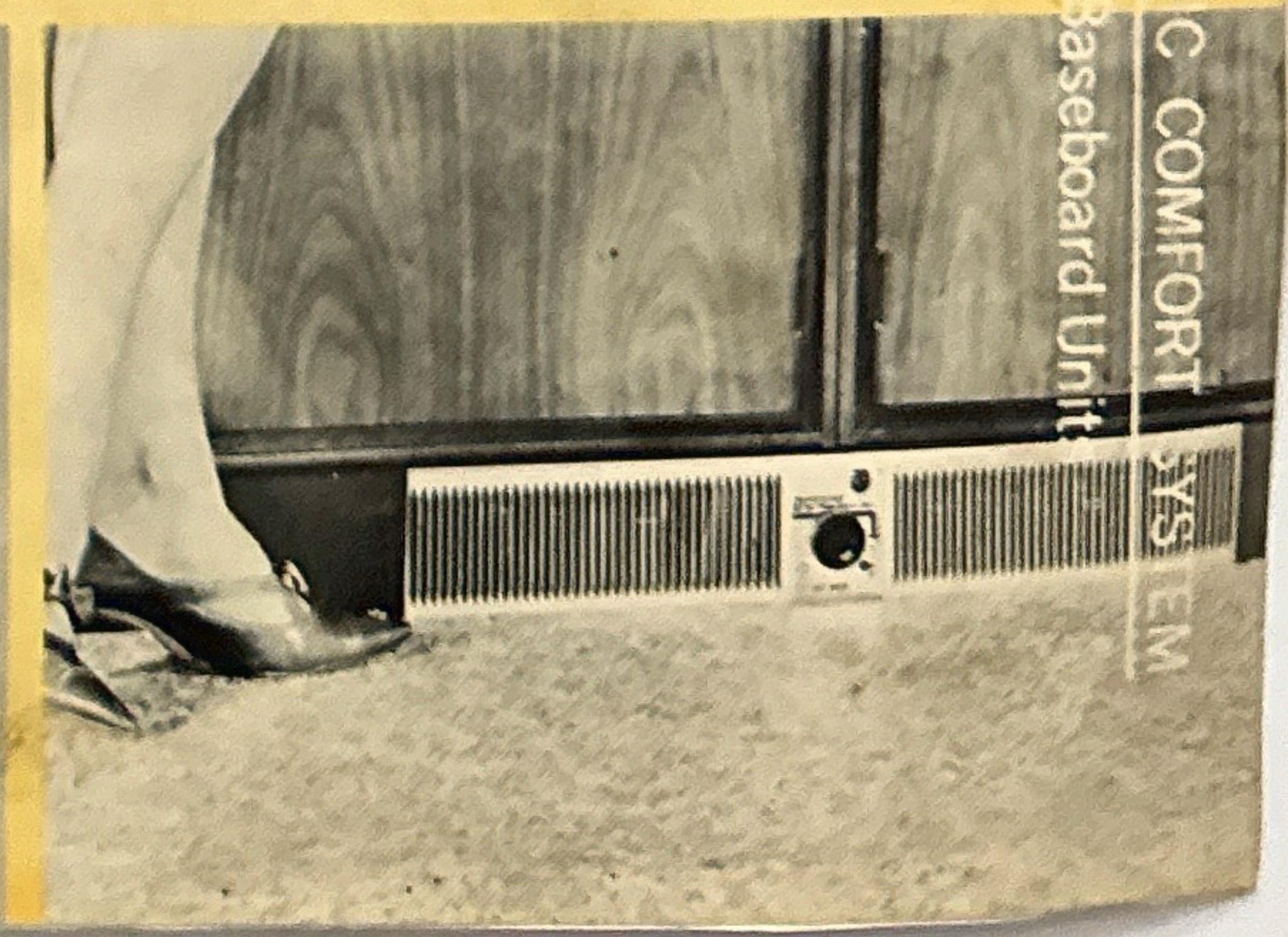
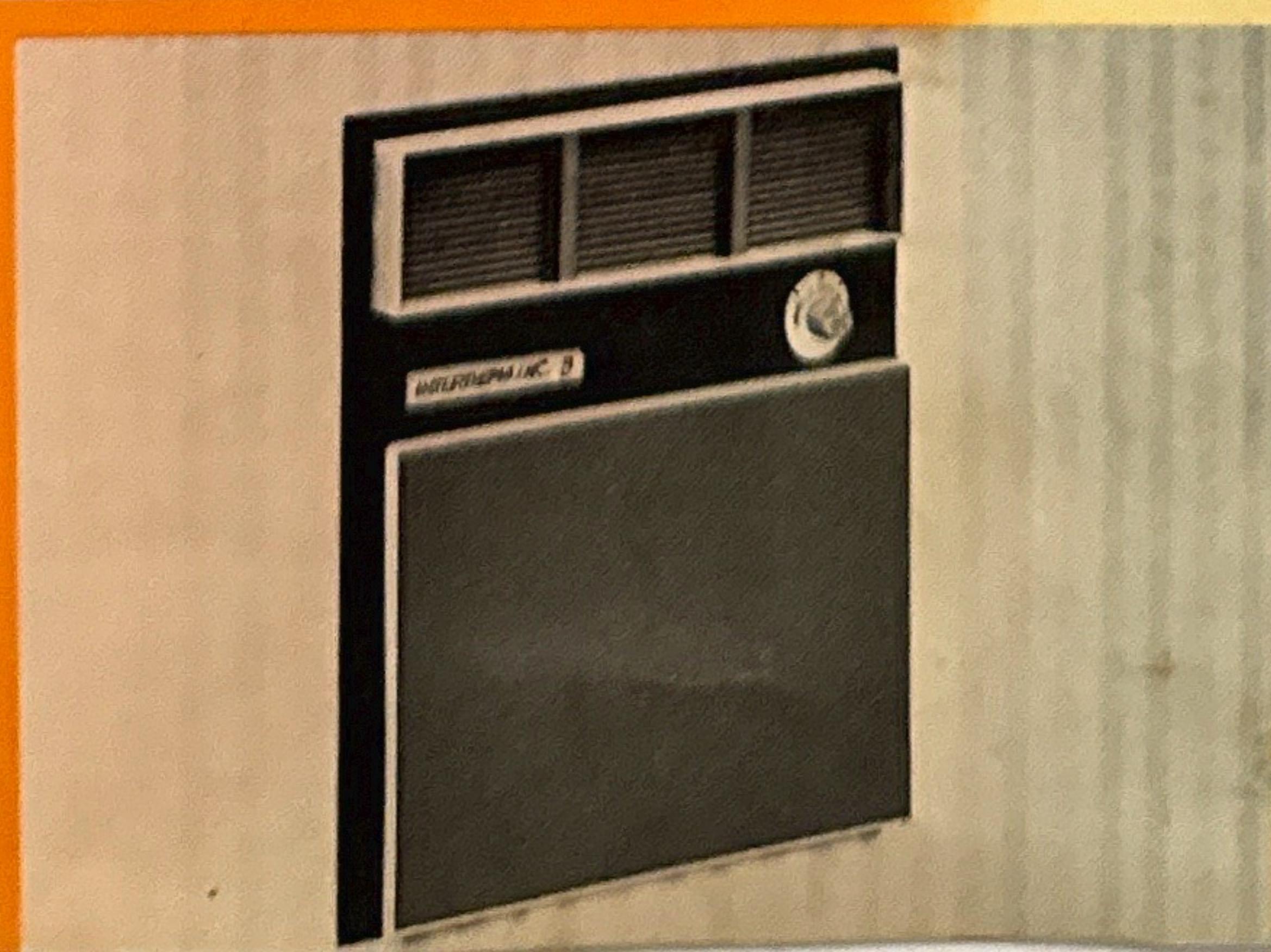
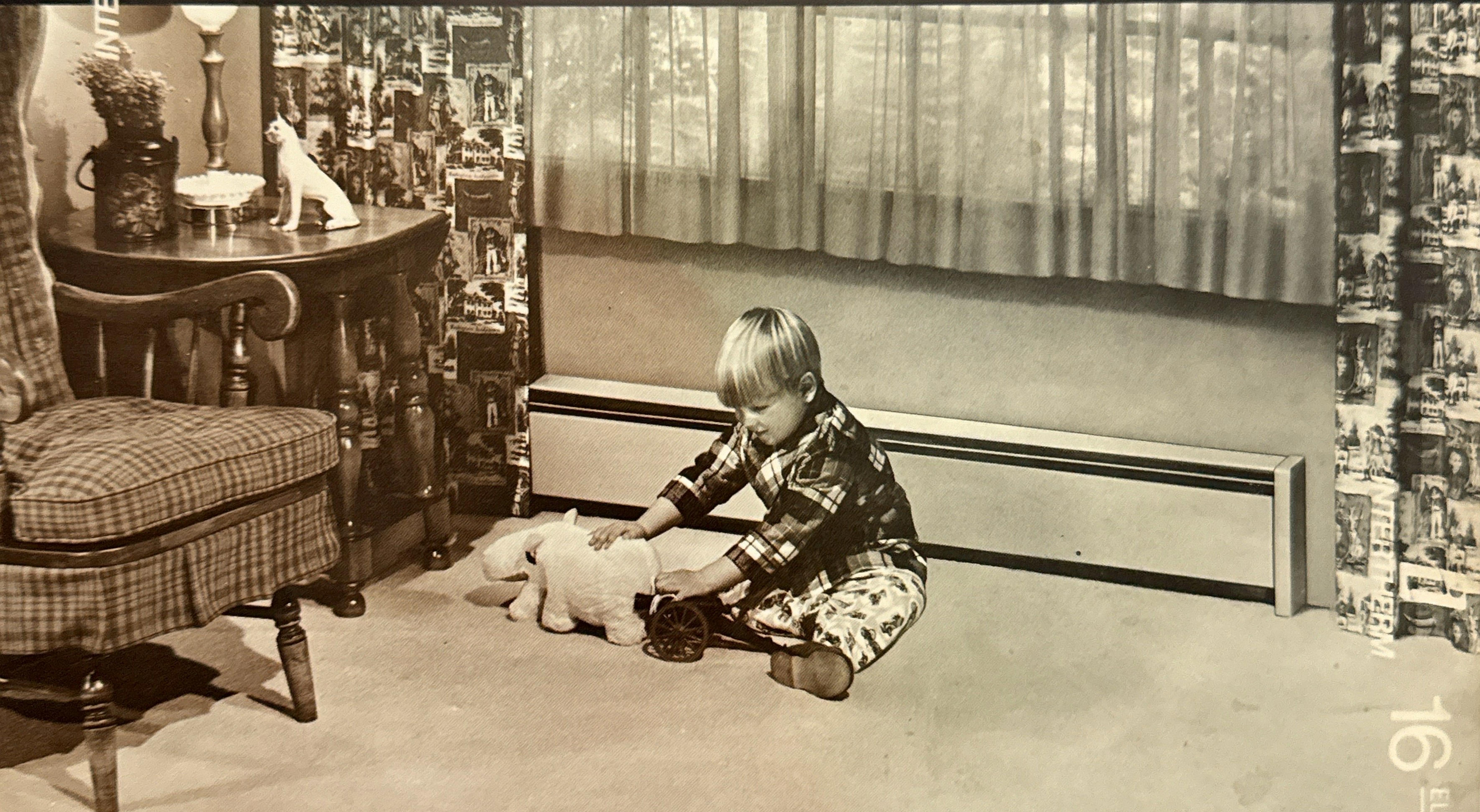


The finest dimension  
yet achieved in  
home heating

# HOT WATER HEAT WITHOUT PLUMBING

from INTERTHERM®

Now Available With Intertherm Air Conditioning



# HOW YOU CAN HAVE A SUMMERTIME CLIMATE ALL WINTER LONG.

No other heating system on the market today does quite as much for the home environment as Intertherm hot water electric heat.

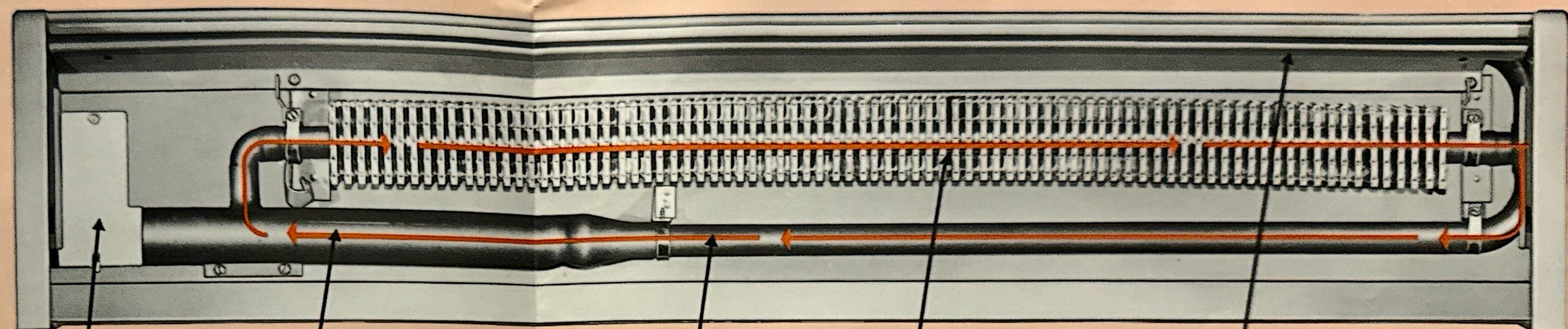
It not only heats the home with a softness that provides unparalleled comfort, but it provides true benefits in healthfulness, cleanliness and safety as well.

And, at an annual operating cost that is comparable to other fuels.

For years, heating engineers have been in accord on the advantages of traditional hot water heat... its evenness of temperature, its efficiency throughout the heating season. At the same time, cleanliness and safety have been the hallmarks of traditional electric heat.

Combine the two and you not only attain the benefits of both forms of heat, you develop further advantages as described below. Advantages that can be attested to by hundreds of thousands of families already enjoying the wonder of Intertherm hot water electric heat... and knowing the true luxury of a summertime climate in their homes all year long.

Slender and attractive Intertherm baseboards are available in various lengths to meet every heating requirement.



**ELECTRIC LIMIT CONTROL**  
Automatically shuts the unit off if water becomes overheated. An extra safety factor built into every unit.

**HERMETICALLY SEALED WATER ANTI-FREEZE**  
Hermetically sealed into the copper tube containing water. Heats the water when thermostat calls for heat, to exactly the temperature needed to balance cold air coming off cold walls into rooms from outside walls and windows.

**WATER, FREEZE PROTECTED**  
Hermetically sealed, it circulates in a continuous cycle through the tube as shown by the arrows when heated by the element. It continues to circulate and give off heat even when the element is shut off. Never needs refilling.

**HEAT DISTRIBUTION**  
Air drawn from the surface of the floor passes over this finned area on the copper tubing. Here it absorbs the exact amount of desirable heat required, and gently circulates it upward to warm the cold air descending at outside walls and windows. The air is warmed to a comfort level for each individual room.

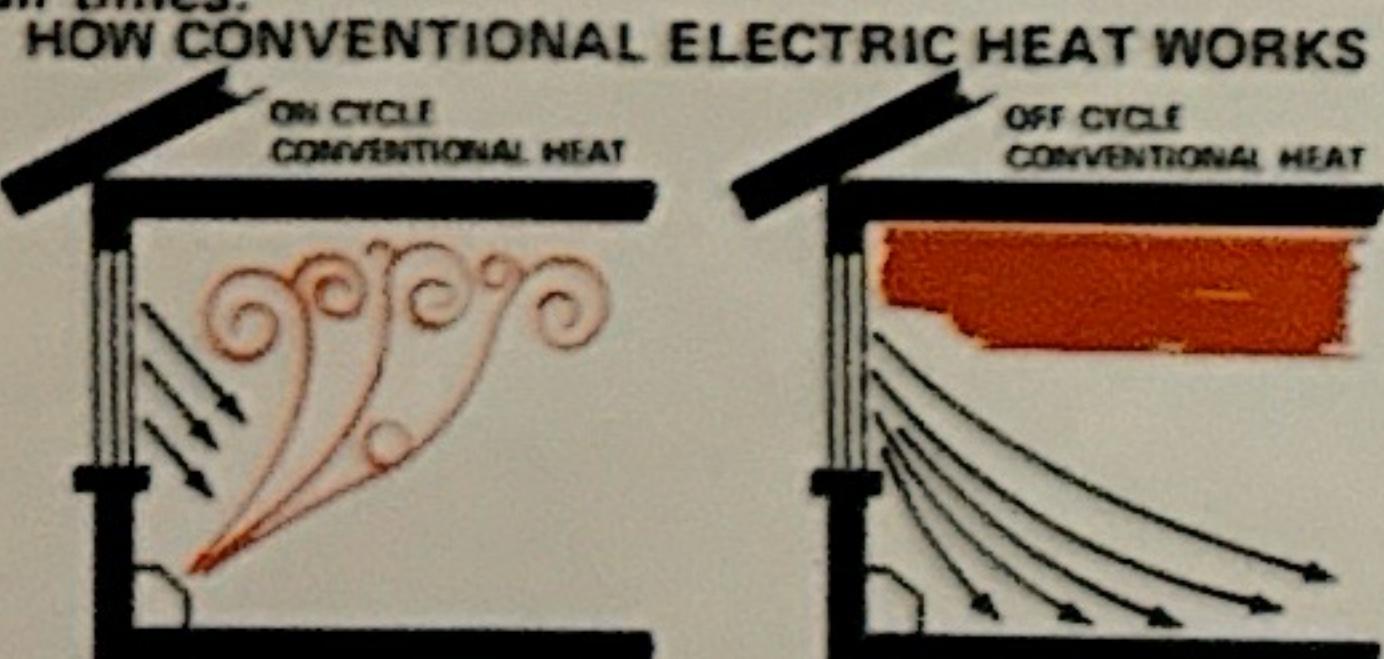
**AIR EXPANSION CHAMBER**  
This chamber compensates for the expansion of the water when it is heated. UL listed pressure relief system provides absolute protection against excess pressure at any time.

**SELF-CONTAINED SYSTEM**  
Entire circulatory system is self-contained. Needs no plumbing, piping or other water media. Begins working when connected to an electrical source. No blowers, no motors. Silent operation. Nothing to maintain.

## COMFORT

Intertherm comfort secret is that it balances exactly the cold air coming off windows and outside walls with just the right amount of heat needed. It does this by changing the temperature of the water, as is illustrated under "Economy".

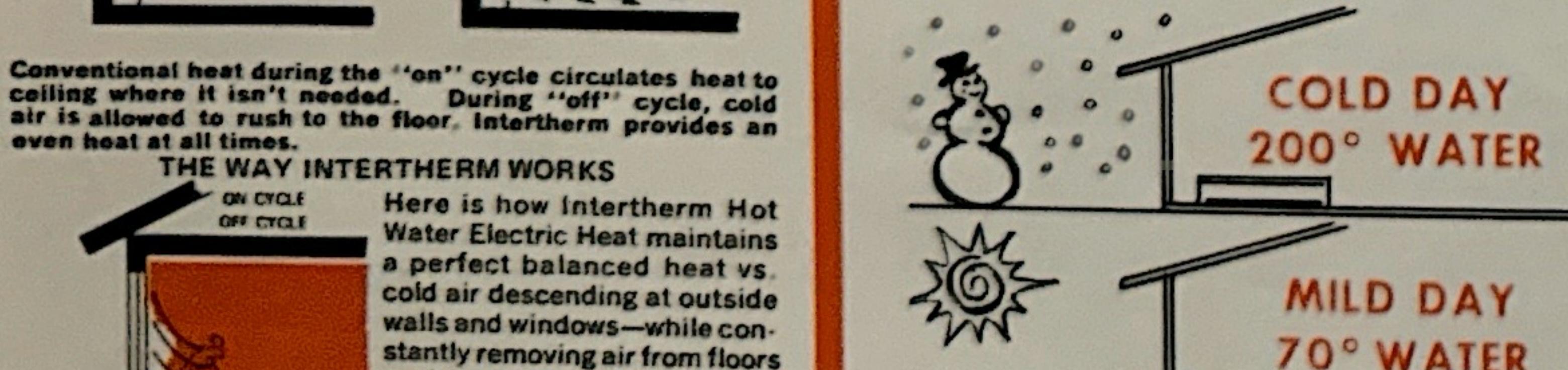
As a result, heat isn't blown to the ceiling as with conventional systems. Rather, a remarkably uniform floor-to-ceiling temperature is attained. As a result the floors are warm, there are no cold drafts. And, because heat continues to emanate from the warmed water even after the electric element has been shut off by the thermostat, there are no conventional "on" and "off" cycles. Smooth, soft heat is gently circulated at all times.



Conventional heat during the "on" cycle circulates heat to ceiling where it isn't needed. During "off" cycle, cold air is allowed to rush to the floor. Intertherm provides an even heat at all times.

### THE WAY INTERTHERM WORKS

Here is how Intertherm Hot Water Electric Heat maintains a perfect balanced heat vs. cold air descending at outside walls and windows—while constantly removing air from floors and heating it to the exact temperature needed to maintain nearest floor to ceiling temperature of all heating methods tested.



On a cold day, when heat is needed, the water in the baseboards might rise to over 200° F. On a mild day, to perhaps 70° F. Thus no more heat is used than absolutely needed. Conventional heating systems, furnaces, etc., operate at the same temperature regardless of outside weather. Indoor temperature is controlled by on-off cycling... a noisy, drafty and heat-wasting method. This is an exclusive patented development and no other heating method can make this claim.

## ECONOMY

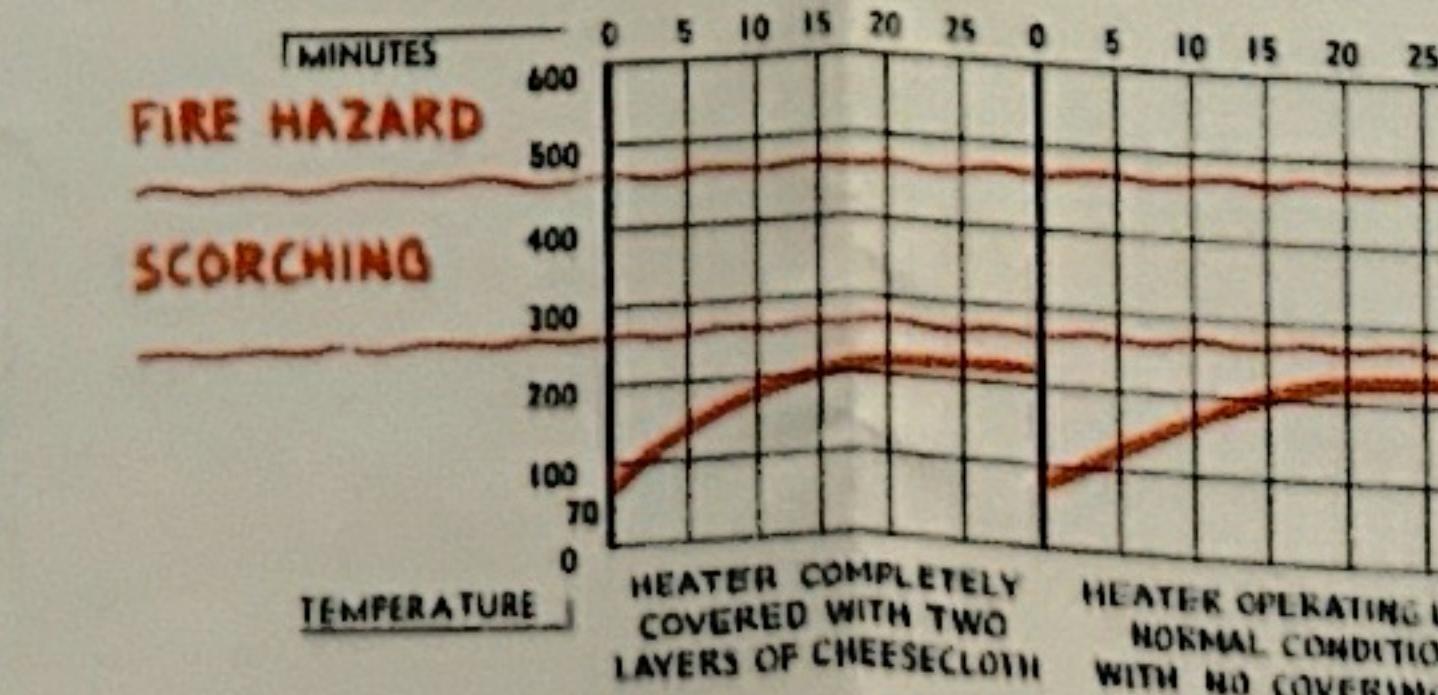
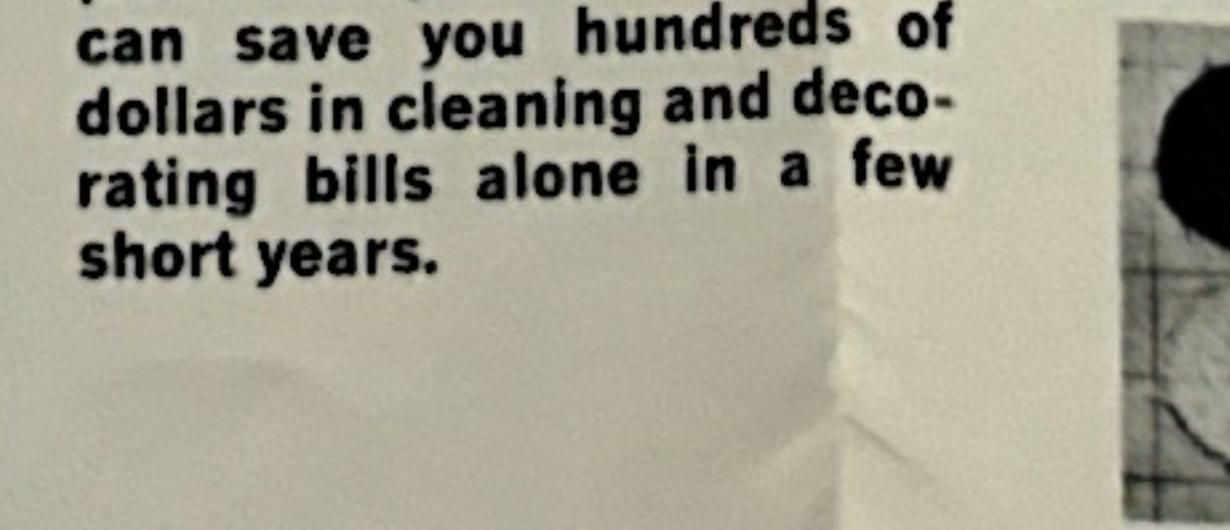
The same factors that create comfort also create economy. Even when electricity isn't being used, heat is given off by the warmed water. And, because the water temperature changes according to outside weather conditions, only as much heat as is needed is given off... never too little, never too much. Further because of highly uniform floor to ceiling temperatures, heat isn't wasted at the ceiling, where it isn't needed. This even, gentle heat allows you to achieve remarkable comfort at lower thermostat settings. Laboratory reports show that for every degree above 70 needed at ceilings to provide 70° comfort at floors operating costs rise 3.1%.

Finally, on initial installation, substantial savings are provided by the elimination of such things as boiler, furnace, ducts, chimney, fuel tank, pump and piping.

In most areas, the annual costs of Intertherm hot water electric heat are comparable to other fuels because of its unique method of operation.

## CLEANLINESS

In every home, millions of tiny lint-dust particles float through the air. You have seen them in the sun's rays coming through a window. When heated to over 325° F., this lint-dust is burnt into carbon cinder particles, which lodge in furnishings, draperies, carpeting, and particularly around heat registers on walls. Gas and oil furnace heat exchanger surfaces rise in temperature to as high as 800° F. And conventional electric heating systems from 400° F to 750° F. You can tell this by looking at an air conditioning filter. It's gray. A furnace filter, on the other hand, is black because it contains these burnt particles. Because Intertherm eliminates burnt particles by never heating as high as 325° F., it can save you hundreds of dollars in cleaning and decorating bills alone in a few short years.



Intertherm heaters don't burn dust particles. Graphs show that heater water stays at safe temperature levels even when covered. Electrical limit control shuts unit off automatically when water is too warm, turning it on when water has cooled. Photo shows cheesecloth that scorched when placed on fins of conventional electric heater only 30 minutes. Beneath it is cheesecloth placed on fins of Intertherm heater for 90 minutes, and remained unscorched. Plastic and synthetic materials, as a matter of fact, actually burn into toxic gases.

## HEALTHFULNESS

In a book written by Dr. Theron G. Randolph, he discusses the allergic sensitivities that may be caused by gases of combustion types of heating systems. These gases are released when the chimney isn't yet warm enough to draw them up and out between thermostat cycles. He also discusses the sensitivities to petro-chemicals... caused by particles of plastic-synthetic materials. These particles are vaporized into toxic gases, when passing over the high temperatures of furnace heat exchangers and conventional electric elements. Plastic synthetic materials are found in draperies, furnishings, etc., and are being used in the home with increasing frequency.

Intertherm, because of its hermetically sealed construction and low temperature heat exchanger surfaces completely eliminates any possibility of introducing either petro-chemical combustion gases, carbonized lint-dust or toxic plastic synthetic gases into the home environment.

There is no stratification of the heat at the ceiling to cause stuffiness. And, because Intertherm is a "wet" heat, the dryness normally associated with winter time living is alleviated.

Intertherm is truly a breath of fresh air. Ask your doctor.

## SAFETY

Safety of operation must be a major consideration for any family purchasing a home heating system. After all, your heating system operates day and night through a minimum of six to seven months a year, whether you are at home or not.

Statistics show:

(1) That 10% of all fires are caused by chimneys and flues. *Intertherm hot water electric heat requires neither.*

(2) 18% of all school fires are caused by "flame" combustion heating systems. *Intertherm has neither "flame" combustion nor open electric coils.*

(3) Other electric heating manufacturers state that their baseboards should not be installed with draperies or furniture touching them. Intertherm hot water electric heat can be installed behind draperies, furniture and doors without fear. The low hot water temperatures cannot cause scorching. Intertherm has long been approved for just such installations under the rigid code of the City of New York, and has been listed by Underwriters' Laboratories, and Canadian Standards Association.

(4) Exposed coils in ordinary electric resistance baseboards can cause fires if tissue or other flammable matter is accidentally stuffed into them. *With Intertherm, you can stuff tissue or even soft cotton gauze, anywhere into the heaters and let it stay for hours with no fire hazard.*

All in all, Intertherm hot water electric heat is undoubtedly the safest heat being marketed today.



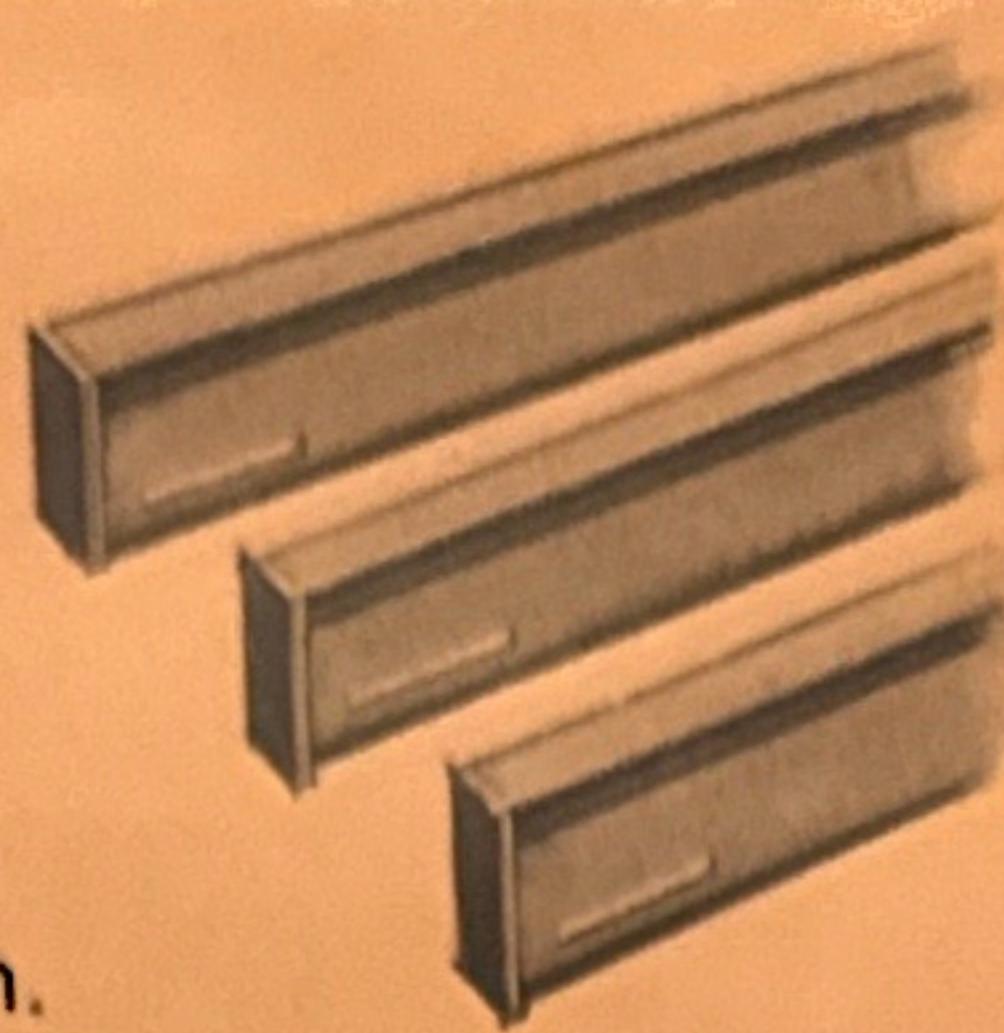
\*As plastic-synthetic drapery materials generally discolor at low warm water temperatures, spacing of 1-3/4" from heaters is advised.

# Exclusive .. Patented HOT WATER ELECTRIC HEAT

for providing .. Silently .. Absolutely Draft Free .. the very finest Comfort, Economy, Safety, Cleanliness and Healthfulness in home, apartment, Motel, etc. Heating.

## Permanent Baseboards

Intertherm permanent baseboard heaters come in a variety of lengths to meet any need, from 27" to 107". These heaters must be permanently connected to an electrical source. Available for wall or built-in thermostat installation.

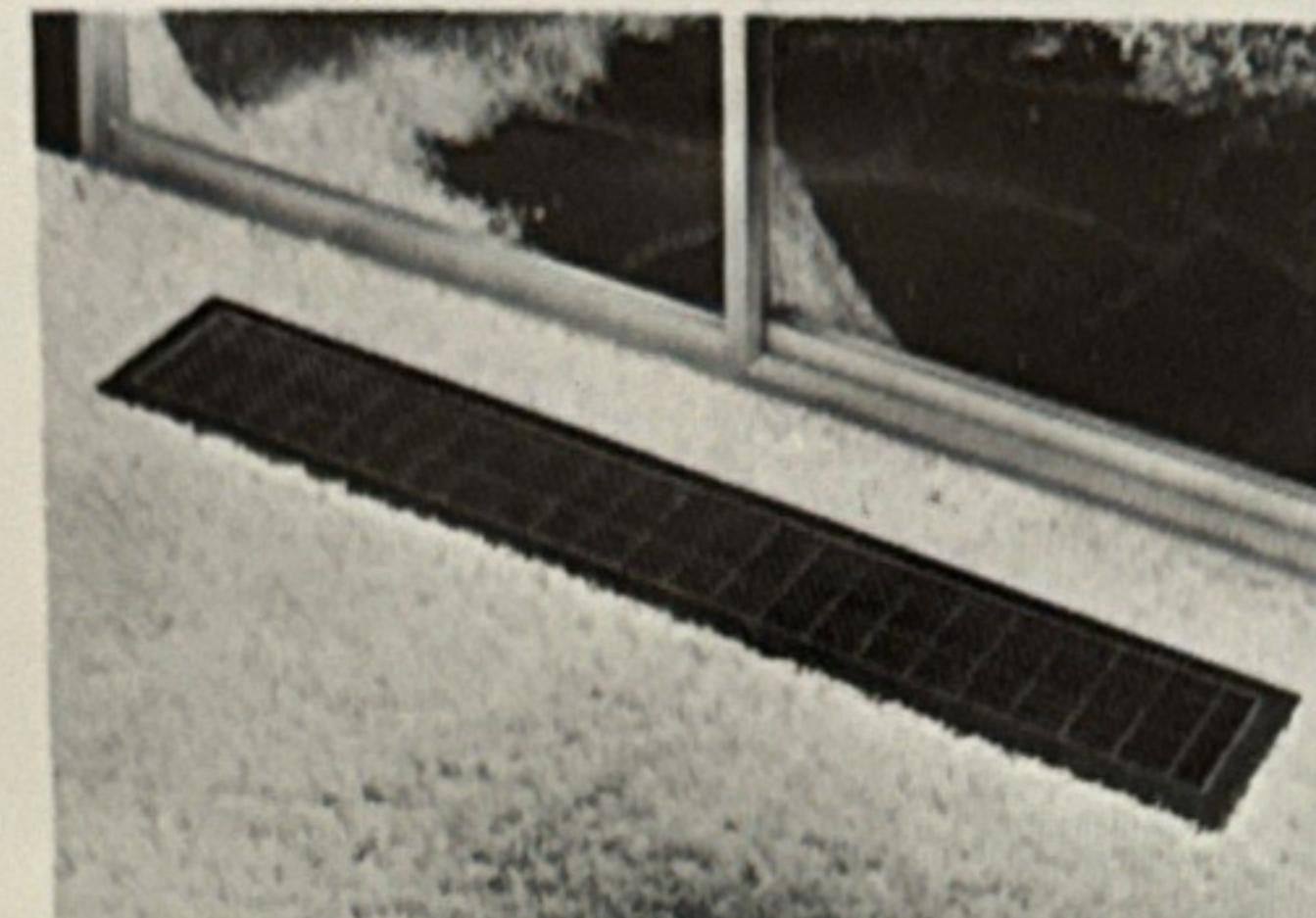


MODEL	BTU/HR	WATTS INPUT	ELECTRICAL DATA			SHIP			
			VOLTS	PHASE	AMPS	WT/LBS	LENGTH	DEPTH	HEIGHT
EBH 300	1050	300	240	1	1.25	15	23"	3-1/4"	9-1/2"
EBH 500	1700	500	240	1	2.85	20	35"	3-1/4"	9-1/2"
EBH 750	2550	750	240	1	3.15	27	47"	3-1/4"	9-1/2"
EBH 1000	3400	1000	240	1	4.2	33	59"	3-1/4"	9-1/2"
EBH 1380	4700	1380	240	1	5.75	37	71"	3-1/4"	9-1/2"
EBH 1500	5100	1500	240	1	6.3	45	83"	3-1/4"	9-1/2"
EBH 2000	6800	2000	240	1	8.4	57	107"	3-1/4"	9-1/2"

While 240 volts are standard, other voltages are available on order.

## Recessed Heaters

Same principle of operation as baseboards, but recessed into floors. Use where wall space for baseboards is not available. Lengths range from 35-1/4" to 107-1/4". We are pleased to advise this is the heater that has fully passed U.L. latest requirements for absolute safety.



MODEL	WATTS	BTU/HR	AMPS	LENGTH	DEPTH	HEIGHT
FM-400-24	400	1365	1.7	35-1/4"	6-1/8"	10-1/8"
FM-600-24	600	2047	2.5	47-1/4"	6-1/8"	10-1/8"
FM-800-24	800	2730	3.3	59-1/4"	6-1/8"	10-1/8"
FM-1000-24	1000	3413	4.2	71-1/4"	6-1/8"	10-1/8"
FM-1200-24	1200	4095	5.0	83-1/4"	6-1/8"	10-1/8"
FM-1400-24	1400	4778	5.8	95-1/4"	6-1/8"	10-1/8"
FM-1600-24	1600	5460	6.7	107-1/4"	6-1/8"	10-1/8"

## Wall Heater

Same principle of operation as baseboard but with the addition of a fan that is extremely quiet in operation. This beautifully designed heater is ideal for bathrooms and other areas where floor space is at a premium.

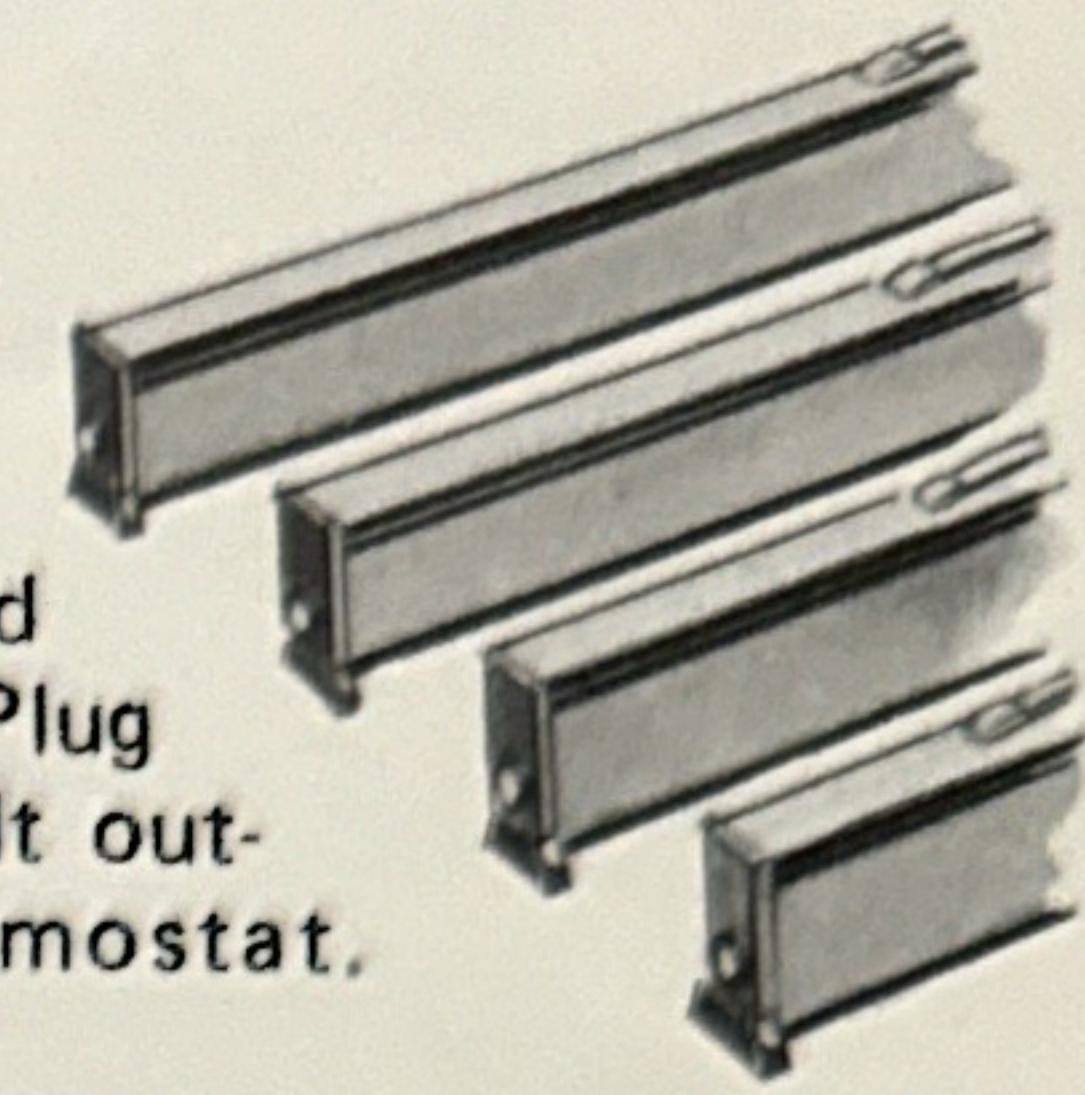
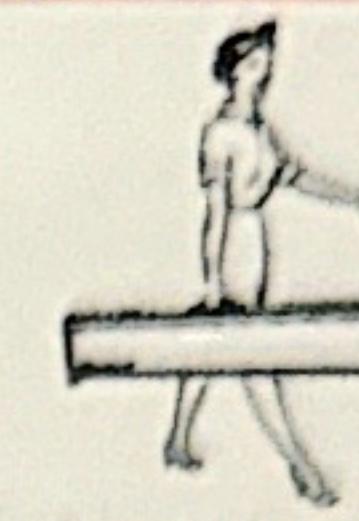
Rough-in dimensions 14-3/8" x 18-3/8" (No headers required) 1000 watt, 3400 BTU, 120 or 240 volt. Built-in thermostat standard.



WA 1000-2 (120 V)  
WA 1000-4 (240 V)

**IN ITS LIMITED WARRANTY**, (a copy of which is furnished with each appliance) Intertherm Inc. warrants its appliances against failure due to defects in material and workmanship for a period of one year from date of purchase. Intertherm Inc. further warrants the heat exchangers (sealed element systems) of its appliances against such failures for a period of ten years from date of purchase. Under this warranty, which is extended to the original owner-user only, Intertherm Inc. will supply a replacement for any defective part or heat exchanger, while the owner-user must pay freight, labor and other charges incurred in the removal of the defective part or heat exchanger and installation of the replacement. During the sixth to tenth years, the owner-user will also be required to pay an increasing portion of the retail price of any replacement heat exchanger. A copy of Intertherm Inc.'s limited warranty is supplied with each appliance, and additional copies are available from Intertherm Inc. upon request. The warranty itself should be referred to for details and conditions of or restrictions upon the warranty coverage.

## Portable Baseboards

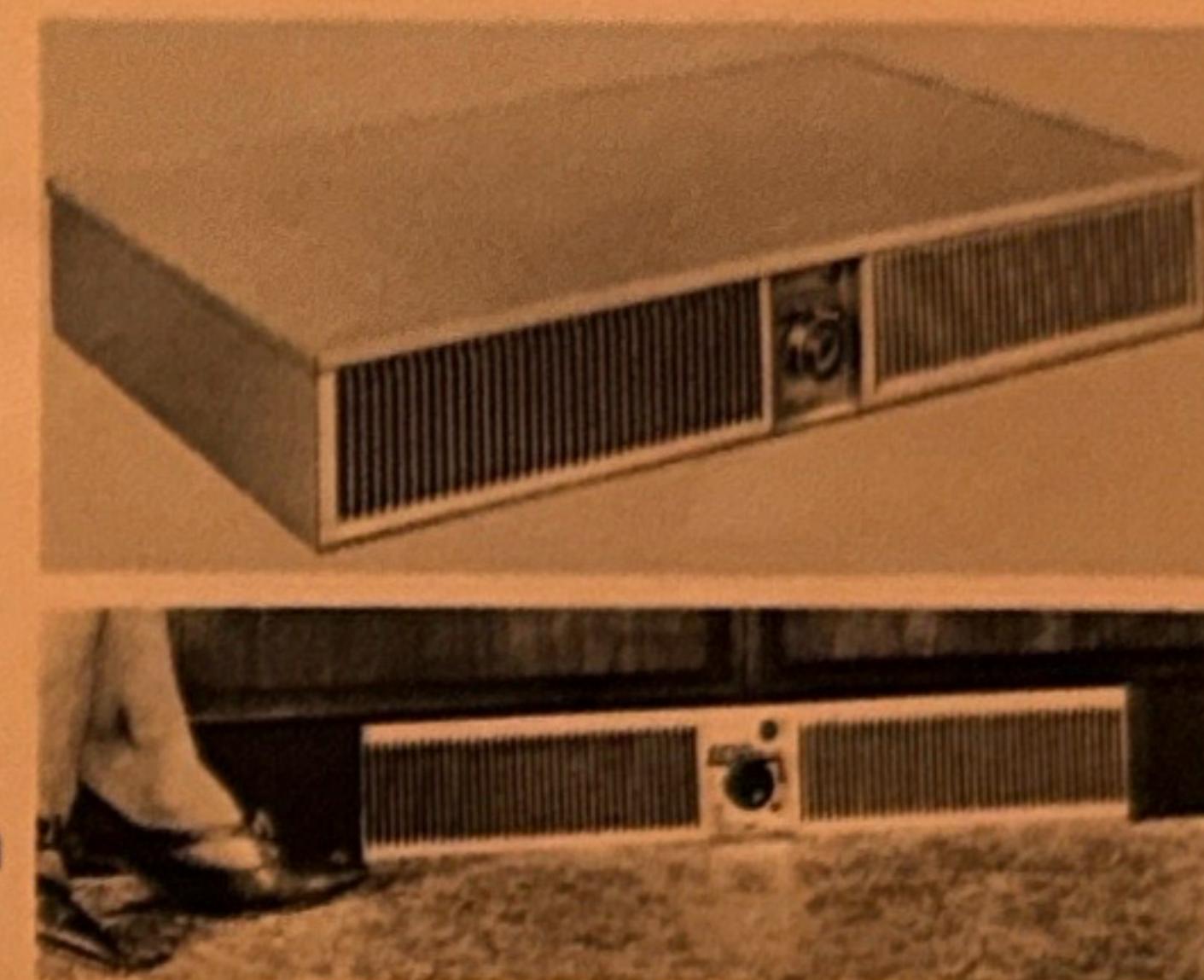


Provide the best answer to heating such problem areas as sun porches and other seasonally occupied rooms. Plug into any standard household 120-volt outlet. Comes with a built-in thermostat. (Special voltage available on order)

MODEL	ROOMS TO	WATTS	BTU/HR	HEATS			SHIP WT/LBS
				LENGTH	DEPTH	HEIGHT	
EP-300	6' x 6'	300	1020	23"	3-1/4"	9-1/2"	17
EP-500	7' x 7'	500	1700	35"	3-1/4"	9-1/2"	21
EP-750	8' x 8'	750	2550	47"	3-1/4"	9-1/2"	28
EP-1000	10' x 10'	1000	3400	59"	3-1/4"	9-1/2"	34
EP-1380	11' x 11'	1380	4690	71"	3-1/4"	9-1/2"	37
EP-1500	12' x 12'	1500	5100	83"	3-1/4"	9-1/2"	46

## Under Cabinet Heater

Same principle of operation as baseboards, but with the addition of a fan that is extremely quiet in operation. This heater is ideally suited for kitchens, where it can be installed in the toe space under kitchen cabinets. Can also be used under bathroom vanities and furniture. Only



3-1/2" high x 22" wide x 14" deep. 1000 watt, 3400 BTU, 120 or 240 volt. Built-in thermostat optional.

**ARCHITECT'S SPECIFICATIONS**—Furnish and install Intertherm Inc. electric hot water heating units as shown on the plans and schedule.

**CABINET**—Cabinet shall be of twenty-two gauge cold-rolled steel coated with a baked-on finish of alkyd enamel. Cabinets of permanently installed units shall have adequate means for being mounted securely into place.

**HEATING SECTION**—Shall consist of hermetically sealed, silver-brazed copper tubing assembly with mechanically affixed aluminum heat transfer fins. The wall thickness of the heater tube shall be approximately .050 and of the finned and circulating tubes, .025. The thermally circulated liquid medium shall consist of water anti-freeze solution under pressure which shall completely fill the unit, with the exception of the volume left for expansion purposes. Combination hermetically sealed and spring-loaded U.L. listed pressure relieving device shall be an integral part of the heating section. Electric thermal energy shall be applied to the heating section by means of a separate copper sheathed electric heating element completely surrounded by the heat transfer fluid. A U.L. listed temperature limiting, thermally actuated device shall be mounted into intimate contact with the heating tube and shall open the electrical circuit in the event of overheating of the element due to air blockage, or any other cause. In addition, a hermetically sealed rupture disc in combination with a spring loaded pressure relief control is to be provided for full protection against excessive pressures at any time. The temperature shall not exceed 300° F on any part of the heating assembly.

**CONTROLS**—On those units which contain temperature regulating controls, the controls shall be of the snap action type and shall cause no radio or television interference during their functioning. On those units which do not contain an integral control, the unit shall be controlled by thermostats, relays or night set back controls as furnished by the Intertherm Inc.

EXCLUSIVE U.S. PATENT NOS. - 3,150,250; 3,281,574  
3,281,574; 3,417,227



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